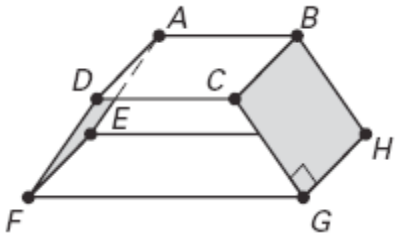
Geometry Date_____ 3.1 Assignment
Lines and Angles (pp 120-131)

1. What is your name?

Think of each segment in the diagram as part of a line. Is each pair of lines parallel, skew, or perpendicular?

2. $\overleftrightarrow{DC}$ & $\overleftrightarrow{AB}$

3. $\overleftrightarrow{FG}$ & $\overleftrightarrow{GH}$

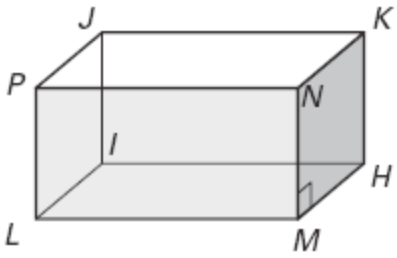


4. $\overleftrightarrow{CD}$ & $\overleftrightarrow{BH}$

5. $\overleftrightarrow{AD}$ & $\overleftrightarrow{GH}$

6. Plane CGF & plane ABH.

Think of each segment in the diagram as part of a line. Although there may be more than one correct answer, you only need to list one.



7. Name a line parallel to $\overleftrightarrow{PN}$.

8. Name a line skew to $\overleftrightarrow{PN}$.

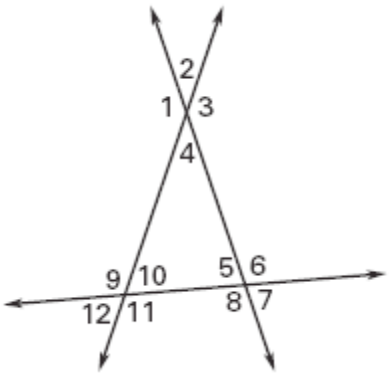
9. Name a plane parallel to PNM.

10. Name a line perpendicular to $\overleftrightarrow{NM}$.

Is each pair of angles corresponding, alternate interior, alternate exterior or same-side interior?

11. $\measuredangle 8$ & $\measuredangle 2$

12. $\measuredangle 10$ & $\measuredangle 5$



13. $\measuredangle 4$ & $\measuredangle 9$

14. $\measuredangle 12$ & $\measuredangle 1$

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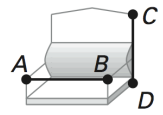
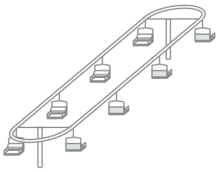
Use the diagram of the ski lift to decide whether the statement is true or false.



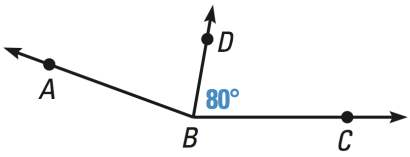


15. _____ At any position around the lift, the line containing the crossbar, $\overleftrightarrow{AB}$, of each chair is parallel to the ground.

16. _____ For any chair of lift, the line containing the back support, $\overleftrightarrow{CD}$, and the line containing the crossbar, $\overleftrightarrow{AB}$, are skew lines.

17. _____ At any position around the lift, the line containing the back support, $\overleftrightarrow{DC}$, is perpendicular to the ground. (Assume the carts are hanging as shown in the diagram.

18. The ray $\overrightarrow{BD}$ bisects $\angle ABC$. Find $m\angle ABD$ & $\angle ABC$. (Chapter 1 section 5)



Find the measures of a complement and a supplement of the angle.
(Chapter 1 Section 6)

19. $68°$ **20.** $45°$

Solve the equation and state a reason for each step. (chapter 2 section 4)

21. 4x + 11 = 31 **22.** 5x + 7(x - 10)